

**AMENDMENT TO THE CLAIMS**

1. (Canceled)
2. (Previously Presented) The method in accordance with claim 35, wherein a warning indication is generated by an evaluation criteria if there is a deviation from one of a preset and a predeterminable threshold criteria.
3. (Previously Presented) The method in accordance with claim 2, wherein the individual pulse oscillogram (PO) is subjected to an analysis regarding the hemodynamic stability.
4. (Previously Presented) The method in accordance with claim 3, wherein prior to obtaining assessment criteria, influential values of at least one of artifacts and arrhythmia are suppressed.
5. (Canceled)

6. (Previously Presented) The method in accordance with claim 35, wherein pulse period lengths of at least a starting range and an end range of the individual pulse oscillogram (PO) are compared with each other, and a deviation of the pulse period lengths of a starting range ( $T_{\text{initial}}$ ) and an end range ( $T_{\text{terminal}}$ ) is made a basis of the assessment criteria.

7. (Previously Presented) The method in accordance with claim 6, wherein a deviation of the lengths of the pulse period is calculated by the individual pulse oscillogram (PO) as a difference of lengths of the periods of the starting range and the end range as a function of a mean pulse period length of the pulse oscillogram.

8. (Previously Presented) The method in accordance with claim 35, wherein an entire progression of all pulse periods in regard to their chronological change is determined and used as a measure for the hemodynamic stability.

Serial No.: 10/572,997

9. (Previously Presented) The method in accordance with claim 35, wherein an entire progression of pulse-specific systolic times in regard to changes over time is determined and used as a measure of the hemodynamic stability.

10. (Previously Presented) The method in accordance with claim 9, wherein an assessment of a constancy of the pulse period progression is included when forming the assessment criteria.

11. (Previously Presented) The method in accordance with claim 10, wherein a rise ( $\alpha$ ) in an ascending branch of one of an envelope and a rise ( $\beta$ ) in a descending branch, a plateau width (PL) around a maximum, or a combination of at least two of these characteristic values from the pulse amplitude progression each is used as a characteristic value for forming the assessment criteria.

12. (Previously Presented) The method in accordance with claim 11, wherein as the assessment criteria for the hemodynamic stability the analysis of the pulse shape includes a determination of at least one rise at least at one point of at least one of an ascending flank and a descending pulse flank, and a chronological

Serial No.: 10/572,997

change in the rise at the respective points or a ratio of the rises at least at two points of a pulse is checked for different pulses.

13. (Canceled)

14. (Previously Presented) The method in accordance with claim 12, wherein at least one of a breathing frequency signal, an electrocardiogram signal and a skin impedance measurement signal each is determined and evaluated in regard to a chronological change during a blood pressure measurement.

15. (Previously Presented) The method in accordance with claim 14, wherein a breathing frequency signal is obtained from one of the analysis of the pulse oscillogram and by an additional sensor arrangement.

16. (Previously Presented) The method in accordance with claim 15, wherein a diagnosis of hemodynamic instability is an automated correction of error effects.

17. (Previously Presented) The method in accordance with claim 35, wherein the sphygmomanometer comprises an inflatable cuff and an evaluating device which can be arranged thereon or connected to it, with a unit creating the individual pulse oscillogram (PO), a blood pressure determination device and a display device, comprising the evaluating unit having an assessment arrangement embodied so that assessment criteria for the presence of hemodynamic stability are formed with it during the determination of the individual pulse oscillogram (PO), and the display device has an indicator of hemodynamic instability.

18. (Previously Presented) The method in accordance with claim 17, wherein the assessment arrangement is designed for detecting at least one of a pulse period progression, a pulse amplitude progression, pulse forms from the individual pulse oscillogram (PO), a formation of the assessment criteria from the pulse period progression, a pulse amplitude progression, and a pulse form change.

19. (Previously Presented) The method in accordance with claim 18, wherein the assessment arrangement detects at least one secondary physiological parameter correlating with a change of hemodynamics which relates to at least one of a breathing frequency signal, an electrocardiogram signal and a skin impedance signal.

20. (Previously Presented) The method in accordance with claim 17, wherein the assessment arrangement detects at least one secondary physiological parameter correlating with a change of hemodynamics which relates to at least one of a breathing frequency signal, an electrocardiogram signal and a skin impedance signal.

21. (Previously Presented) The method in accordance with claim 35, wherein the individual pulse oscillogram (PO) is subjected to an analysis regarding the hemodynamic stability.

22. (Previously Presented) The method in accordance with claim 35, wherein prior to obtaining the assessment criteria, influential values of at least one of artifacts and arrhythmia are suppressed.

23-27. (Canceled)

28. (Previously Presented) The method in accordance with claim 35, wherein an assessment of a constancy of the pulse period progression is included when forming the assessment criteria.

29. (Previously Presented) The method in accordance with claim 35, wherein a rise ( $\alpha$ ) in an ascending branch of one of an envelope and a rise ( $\beta$ ) in a descending branch, a plateau width (PL) around a maximum, or a combination of at least two of these characteristic values from the pulse amplitude progression each is used as a characteristic value for forming the assessment criteria.

30. (Previously Presented) The method in accordance with claim 35, wherein as the assessment criteria for the hemodynamic stability the analysis of the pulse shape includes a determination of at least one rise at least at one point of at least one of an ascending flank and a descending pulse flank, and a chronological change in the rise at the respective points or a ratio of the rises at least at two points of a pulse is checked for different pulses.

31. (Canceled)

32. (Previously Presented) The method in accordance with claim 35, wherein at least one of a breathing frequency signal, an electrocardiogram signal and a skin impedance measurement signal each is determined and evaluated in regard to a chronological change during the blood pressure measurement.

33. (Previously Presented) The method in accordance with claim 32, wherein a breathing frequency signal is obtained from one of the analysis of the pulse oscillogram and by an additional sensor arrangement.

34. (Previously Presented) The method in accordance with claim 35, wherein a diagnosis of hemodynamic instability is an automated correction of error effects.



35. (Currently Amended) A blood pressure measuring method, comprising:

determining with a sphygmomanometer an individual pulse oscillogram (PO) of a patient of a single sphygmomanometer cuff pressure increase and release cycle, ~~for detecting a blood pressure value;~~

measuring a blood pressure value from the individual pulse oscillogram;

testing, in addition to the measuring of the blood pressure value, with an evaluating device of the sphygmomanometer for hemodynamic stability of the patient during the single sphygmomanometer cuff pressure increase and release cycle, the testing comprising determining circulatory rest by the evaluating device determining and evaluating a hemodynamic parameter or at least one other physiological parameter which correlates with the hemodynamic parameter, with respect to chronological changes; and

the evaluating device determining and indicating whether the blood pressure value was obtained during the hemodynamic stability, or whether a corrected blood value is to be determined;

wherein testing for the hemodynamic stability of the patient is performed by determining and analyzing with the evaluating device at least one of a

Serial No.: 10/572,997

pulse period progression, a pulse amplitude progression, or a pulse shape of only the individual pulse oscillogram (PO) to determine circulatory rest.

36. (New) A blood pressure measuring method, comprising:  
determining with a sphygmomanometer an individual pulse oscillogram (PO) of a patient of a single sphygmomanometer cuff pressure increase and release cycle;

measuring a blood pressure value from the individual pulse oscillogram;  
evaluating only the individual pulse oscillogram with an evaluating device of the sphygmomanometer to determine circulatory rest of the patient during the single sphygmomanometer cuff pressure increase and release cycle, by analyzing with the evaluating device at least one of a pulse period progression, a pulse amplitude progression, or a pulse shape, across all pulse periods of the individual pulse oscillogram; and

the evaluating device determining and indicating whether the blood pressure value was obtained during the circulatory rest, or whether a corrected blood value is to be determined.